

IN THE CLAIMS

Please amend the claims as follows:

Claim 1. (Currently Amended) A pulley thrust control device for a belt-type continuously variable transmission unit comprising:

a driving pulley and a following pulley connected via a belt with the driving pulley, and capable of continuously changing a speed changing ratio by changing effective diameters of the driving pulley and the following pulley,

wherein a thrust ratio between the thrust of the driving pulley and the thrust of the following pulley is determined, and

wherein, when the thrust of at least one of the driving pulley and the thrust of the following pulley is changed, the thrust of at least one of the driving pulley and the following pulley is controlled based on a state of change of the thrust ratio.

Claim 2. (original) The device according to claim 1, wherein the pulley thrust is controlled such that the thrust ratio approaches a point at which the gradient of change of the thrust ratio changes.

Claim 3. (original) The device according to claim 2, wherein the gradient of the thrust ratio is periodically determined while the pulley thrust changes; compensation for a time delay is applied to determined values for the gradient; and a point at which the gradient changes is determined based on a signal for which the time delay has been compensated.

Claim 4. (original) The device according to claim 3, wherein, during the compensation for a time delay, a time for delay compensation is set according to the gradient at that time.

Claim 5. (original) The device according to claim 3, wherein a process of compensating for the time delay is a process using a high-pass filter to cut a low frequency signal associated with a periodically-determined gradient.

Claim 6. (original) The device according to claim 1, wherein the state of change of the thrust ratio is determined while the pulley thrust is varied according to a predetermined cycle.

Claim 7. (original) The device according to claim 1, wherein the thrust ratio is determined by measuring a hydraulic pressure which controls thrust of the driving pulley and the following pulley.

Claim 8. (Withdrawn) The device according to claim 1, wherein the thrust ratio is determined based on a command value for  
a hydraulic pressure which controls thrust of the driving pulley and the following pulley.

Claim 9. (Withdrawn) The device according to claim 1, further comprising a control map for determining pulley thrust based on a state of power transmission of the continuously variable transmission unit, wherein the control map is amended based on the state of change of the thrust ratio.

Claim 10. (Withdrawn) The device according to claim 1, wherein an average

friction coefficient ratio is used in place of the thrust ratio so that the pulley thrust is controlled based on the state of change of the average friction coefficient ratio, the average friction coefficient ratio being obtained by multiplying the thrust ratio by a ratio between belt hanging diameters of the driving pulley and the following pulley.

Claims 11-17 (Canceled).

Claim 18. (Previously Presented) The device according to claim 1, wherein the state of change of the thrust ratio is determined while a driving torque is varied.

Claim 19. (Previously Presented) The device according to claim 1, wherein the state of change of the thrust ratio is determined while a driving torque is varied according to a predetermined cycle.

Claim 20. (Previously Presented) The device according to claim 1, wherein the state of change of the thrust ratio is determined while a ground surface disturbance is varied.

Claim 21. (New) A pulley thrust control device for a belt-type continuously variable transmission unit comprising:

a driving pulley and a following pulley connected via a belt with the driving pulley, and capable of continuously changing a speed changing ratio by changing effective diameters of the driving pulley and the following pulley,

wherein a thrust ratio between the thrust of the driving pulley and the thrust of the following pulley is determined,

wherein thrust of at least one of the driving pulley and the following pulley is controlled based on a state of change of the thrust ratio,

wherein the pulley thrust is controlled such that the thrust ratio approaches a point at which the gradient of change of the thrust ratio changes, and

wherein the gradient of the thrust ratio is periodically determined while the pulley thrust changes; compensation for a time delay is applied to determined values for the gradient; and a point at which the gradient changes is determined based on a signal for which the time delay has been compensated.

Claim 22. (New) The device according to claim 21, wherein, during the compensation for a time delay, a time for delay compensation is set according to the gradient at that time.

Claim 23. (New) The device according to claim 21, wherein a process of compensating for the time delay is a process using a high-pass filter to cut a low frequency signal associated with a periodically-determined gradient.

Claim 24. (New) A pulley thrust control device for a belt-type continuously variable transmission unit comprising:

a driving pulley and a following pulley connected via a belt with the driving pulley, and capable of continuously changing a speed changing ratio by changing effective diameters of the driving pulley and the following pulley,

wherein a thrust ratio between the thrust of the driving pulley and the thrust of the following pulley is determined,

wherein thrust of at least one of the driving pulley and the following pulley is controlled based on a state of change of the thrust ratio, and

wherein the state of change of the thrust ratio is determined while a ground surface disturbance is varied.